



NATIONAL STANDARDS COMMISSION  
WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

GENERAL SUPPLEMENTARY CERTIFICATE OF APPROVAL No S2/0

This is to certify that an approval has been granted that patterns of  
Electronic Cash Registers

described herein are suitable for use for trade provided they comply with the  
following descriptions and requirements.

The approval was granted on 12/1/83 and is subject to review on or after 1/2/88.

Signed

Executive Director

1. Conditions of Approval

- 1.1 There shall be no interaction between an electronic cash register and the measuring instrument which would cause an incorrect indication of the measured quantity.
- 1.2 The electronic cash register shall be connected to an output socket on the measuring instrument approved for that purpose in the Certificate of Approval of the measuring instrument.

2. Description of Pattern

The pattern is an electronic cash register intended for connection to a weighing instrument which displays mass only.

(see clause 6 for exclusions)

2.1 Clarity of Printing

Characters shall be not less than 2.5 mm high, and shall be clear, indelible and unambiguous.

2.2 Denomination of Mass, Unit Price and Price

Where denominations of mass, unit price and price do not appear at the head of the respective columns, the following rules shall apply:

Mass shall be expressed in the form:

2.100 kg  
or 0.750 kg

Deprecated option: Omission of zero before decimal marker

Unit Price shall be expressed in the form:

@ \$1.10/kg  
or @ 1.10 \$/kg  
or @ 0.75 \$/kg

Acceptable option: 'AT' or 'at' instead of '@'

Deprecated option: Omission of zero before decimal marker

Price and Total Price shall be expressed in the form:

\$12.34

Acceptable option: Omission of the dollar sign on item prices but not for total price.

2.3 Orientation of Digits and Letters

All digits and letters shall be orientated in the normal viewing position.

2.4 Decimal Marker

The decimal marker shall be a point or a comma in not less than a half-space. No other markings are permitted adjacent to numbers which may be mistaken for a decimal marker.

Deprecated option: A decimal marker cast in the digit type face

2.5 Symbols for Units of Measurement

The following symbols shall be used:

Kilogram	kg
Gram	g
Litre	L
Millilitre	mL

except that KG, G, ML, are acceptable alternatives for printing systems with limited character sets.

2.6 Spacing of Data

Where descriptors or statements of mass, unit price or price are printed on the same horizontal line, they shall be separated by at least one space.

2.7 Unambiguity of Price Column

Where data relating to a particular item is printed on more than one line, no digits, letters or symbols shall appear in the price column except the price.

2.8 Format of Ticket for Check-out Weighing

Items weighed at the check-out shall have a descriptor of the same format as the unweighed items and the descriptor shall have a minimum field of 11 characters.

Weighed items shall appear on the ticket in one of the following ways:

(a)	OVALTINE POTATOES MASS @ UNIT-PRICE TOMATOES MASS @ UNIT-PRICE SOAPFLAKES	PRICE PRICE  PRICE  PRICE	(b)	OVALTINE POTATOES UNIT-PRICE MASS TOMATOES UNIT-PRICE MASS SOAPFLAKES	PRICE PRICE  PRICE  PRICE
(c)	OVALTINE POTATOES MASS UNIT-PRICE TOMATOES MASS UNIT-PRICE SOAPFLAKES	PRICE PRICE  PRICE  PRICE	(d)	OVALTINE POTATOES UNIT-PRICE MASS TOMATOES UNIT-PRICE MASS SOAPFLAKES	PRICE PRICE  PRICE  PRICE
(e)	OVALTINE POTATOES MASS @ UNIT-PRICE TOMATOES MASS @ UNIT-PRICE SOAPFLAKES	PRICE PRICE  PRICE  PRICE	(f)	OVALTINE POTATOES UNIT-PRICE MASS TOMATOES UNIT-PRICE MASS SOAPFLAKES	PRICE PRICE  PRICE  PRICE
(g)	OVALTINE POTATOES MASS UNIT-PRICE TOMATOES MASS UNIT-PRICE SOAPFLAKES	PRICE PRICE  PRICE  PRICE	(h)	OVALTINE POTATOES UNIT-PRICE MASS TOMATOES UNIT-PRICE MASS SOAPFLAKES	PRICE PRICE  PRICE  PRICE
(i)	OVALTINE <hr/> POTATOES MASS UNIT-PRICE <hr/> TOMATOES MASS UNIT-PRICE <hr/> SOAPFLAKES	PRICE  PRICE  PRICE  PRICE	(j)	OVALTINE <hr/> POTATOES UNIT-PRICE MASS <hr/> TOMATOES UNIT-PRICE MASS <hr/> SOAPFLAKES	PRICE  PRICE  PRICE  PRICE

Note: The foregoing ticket formats illustrate the importance of clearly identifying weighed items by indenting, or by a vacant line, or by a line of dashes or other equivalent means, to distinguish them from non-weighed items.

Weighed items may be printed in colour provided no other data is printed in the same colour; weighed items may be printed in a distinctive typeface.

### 3. Verification Mark

An electronic cash register shall have provision for a verification mark, in the form of a stamping plug or a destructible adhesive label, which shall be located so that:

- (a) The mark can be easily affixed without affecting the metrological properties of the instrument.
- (b) The mark is visible without moving the instrument when it is in use.

If a stamping plug is used, it shall consist of a lead plug securely set below the surface of an undercut hole, with a circular face of not less than 12 mm diameter or with a rectangular face of dimensions not less than 8,5 mm x 25 mm and shall be accessible by means of a 50 mm long stamping tool.

If a destructible adhesive label is used a space of not less than 25 mm diameter shall be provided.

### 4. Markings

An electronic cash register shall be clearly and permanently marked with the following data:

Manufacturer's name or mark	
Serial number	
NSC approval number	NSC No S2/0

### 5. Test Procedure

During the verification test of the weighing instrument, operate the electronic cash register, and check that at each test load, the cash register printer repeats the mass exactly, and that the price is correct to  $\pm 0.5c$ ; the price should be checked at 5 unit prices between maximum unit price and 25% of maximum unit price.

### 6. Exclusions

#### 6.1 Peripheral equipment

The following applications are considered to be peripheral<sup>1</sup> and therefore not subject to verification or pattern approval.

- (a) An electronic cash register connected to a weighing instrument which displays mass, unit price and price, and
- (b) An electronic cash register connected to a self-serve driveway flowmeter system.

---

<sup>1</sup> Peripheral equipment shall be connected to an output socket on the measuring instrument approved for that purpose in the Certificate of Approval of the measuring instrument.

6.2 Driveway Flowmeter Systems

Devices associated with self-serve driveway flowmeter system which:

- . control the measurement function and/or
- . control the price-computing function and/or
- . incorporate a transaction-data storage facility for permitting reauthorisation of the driveway flowmeter before payment,

require specific Certificates of Approval.

Note: Self-serve systems which permit reauthorisation before payment shall incorporate means for identifying the retrieved data with the appropriate purchaser.



FG

S2/O  
5/3/84

# NATIONAL STANDARDS COMMISSION

## NOTIFICATION OF CHANGE

### GENERAL SUPPLEMENTARY CERTIFICATE OF APPROVAL No S2/O

#### CHANGE No 1

Pages 1 and 2 of the Certificate dated 21 January 1983 are replaced by the attached pages in which paragraph 2.2 is amended to clarify the original intent, and paragraph 2.8 is amended to reflect current thinking.

Signed

Executive Director



# NATIONAL STANDARDS COMMISSION

G.H.  
S2/O  
18/12/87

## NOTIFICATION OF CHANGE

### GENERAL SUPPLEMENTARY CERTIFICATE OF APPROVAL No S2/O

#### CHANGE No 2

The following change is made to the approval documentation for patterns of  
Electronic Cash Registers.

In General Supplementary Certificate No S2/O dated 5/3/84, amend clause  
2.7 Unambiguity of Price Column, by adding the following footnote:

"Deprecated option: For unit prices in excess of \$99.99/kg, the non-numerical part of the unit price ('/kg') may extend into the price column but only for those print formats where the mass and unit price appear on separate lines."

Signed

Executive Director